Ofcom

Presentation

Net Neutrality and the Open Internet: The Consumer Perspective
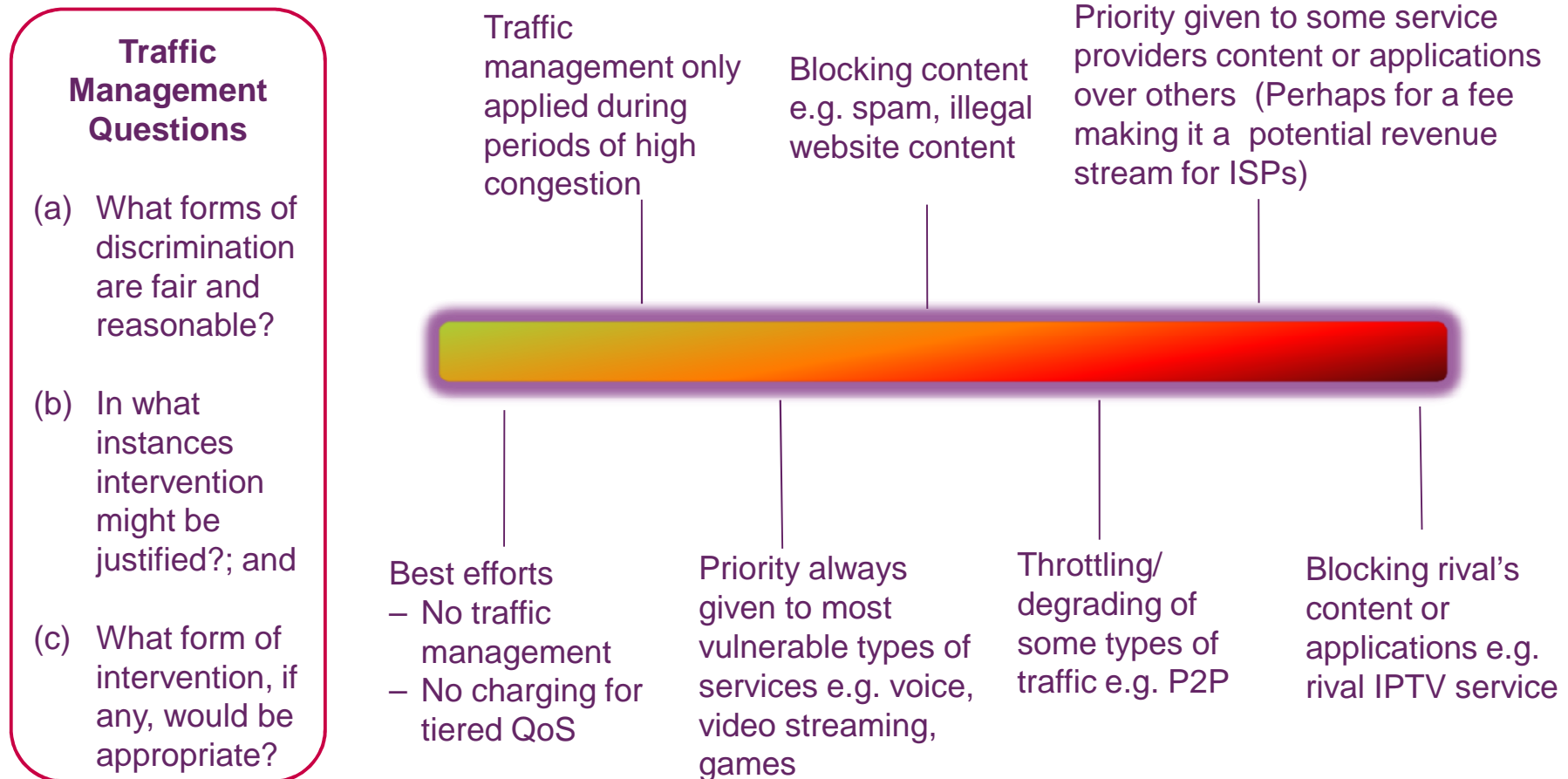
UK market and regulatory context

7th October 2010

Net Neutrality and Traffic Management

- Net neutrality is about **whether and where there should be a principle of non-discrimination regarding different forms of internet traffic carried across networks**

- In its purest sense, it means that there should be no prioritisation of any types of traffic by network operators – i.e. 'all bits are equal' and **no charging** for content providers

- Practically it's about whether communications providers should be allowed to block, degrade, or **charge for** prioritising, application and content providers' traffic, or **whether network operators should be able to charge consumers, service providers, or both** for tiered quality of service

- In reality, some of these practices are already undertaken by communications providers and they have important consumer benefits as well as presenting challenges

New consumer behaviour is changing the market

- The way that consumers are using the internet is changing. People are increasingly making use of content and services that require low latency, e.g. VoIP, or high bandwidth, e.g. streaming video such as the iPlayer

- Currently ISPs:
    - charge consumers for access;
    - access is provided without quality assurance (i.e. "best effort");

- But there is **pressure for change:**
    - emergence of **data intensive applications** (e.g. video); and
    - **delay-sensitive applications** (e.g. video or VoIP);
    - capacity constraints particularly in **mobile**;

The Internet Traffic Management Continuum

Traffic Management Questions

(a) What forms of discrimination are fair and reasonable?

(b) In what instances intervention might be justified?; and

(c) What form of intervention, if any, would be appropriate?

Traffic management only applied during periods of high congestion

Blocking content e.g. spam, illegal website content

Priority given to some service providers content or applications over others (Perhaps for a fee making it a potential revenue stream for ISPs)

Best efforts
– No traffic management
– No charging for tiered QoS

Priority always given to most vulnerable types of services e.g. voice, video streaming, games

Throttling/ degrading of some types of traffic e.g. P2P

Blocking rival's content or applications e.g. rival IPTV service

What is Ofcom's role?

- Our existing powers and duties are being revised. The European Telecoms Framework, once implemented by the UK Government, includes specific changes to legislation designed to:

  – Prevent the degradation of services and the hindering or slowing of traffic

  – Introduce more specific requirements for greater transparency

  – Enable the UK Government to empower Ofcom to impose a 'minimum quality of service on the internet'

- Our discussion paper opens up the debate on how Ofcom's powers might be used to address traffic management concerns.

- The key issues we wish to explore further are:

  – Consumer transparency

  – Anti-competitive discrimination

  – Quality of Service (QoS)

Why is consumer transparency important?

The EU framework sets out more detailed requirements for consumer transparency. Commissioner Kroes stated that transparency is '*non negotiable*'

We concur and believe:

➢ it is a challenge for consumers to understand the impact of traffic management policies on their internet use;

➢ a lack of transparency of traffic management policies may already be an issue for consumers; and

➢ the potential for consumer harm could increase as traffic management becomes more widely deployed and more sophisticated. It could be hard for consumers to detect

Therefore it is important that:

➢ consumers are aware of the traffic management practices of different ISPs and how this affects their ability to access different content and services; and

➢ Are able to switch to a different ISP if they do not like the practices undertaken by their current provider

Consumers are increasingly aware of the impact of traffic management as highlighted in blogs, forums and websites

"yet again we are conned about these **bleep** traffic management and unlimited policies! Obviously not unlimited if you try to use your unlimited service and get throttled!"

"[they] need to upgrade the network and improve traffic management because at the moment it's stopping people from doing what some would believe everyday tasks."

"Maybe they are doing this to all the heavy downloaders as a form of traffic management…ARE WE IN CHINA?"

"xxx throttle and traffic shape 24 hours a day now not just at peak times"

" [it] seems tweaked to prioritise HTTP transfers over much else. Gaming is very hit and miss, with high pings. Any peer to peer programs … are throttled fairly ferociously"
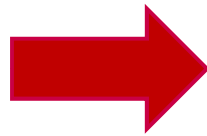
There are core principles for ensuring consumer transparency
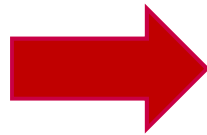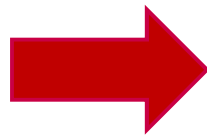
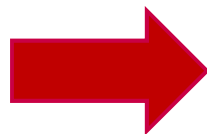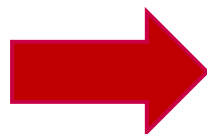|	
APPROPRIATE	Disclose all information (and only such information) that a reasonable customer needs to make an informed purchase decision
ACCESSIBLE	The disclosed information needs to be easy to access (i.e. available at the point of purchase or use)
UNDERSTANDABLE	The disclosed information needs to be clear and simple
VERIFIABLE	Consumers or others need to be able to verify such information
COMPARABLE	Consumers need to be able to compare information across providers

How could this information be presented?

Tiered Approach

- First tier of information is prominently displayed on ISPs websites
- Clearly states the basic information in an easy to read format
- Further technical information is available in the 'second tier' for consumers who need/would like to know more detail about the implications of traffic management techniques on specific services

One Stop Shop

- A central body acts as an information intermediary
- This body holds all the basic information on traffic management practices for each ISP
- Consumers would only need to go to one place for information to help purchasing decisions

Price Comparison Websites

- Third party independent information intermediaries could help consumers navigate their way through the traffic management practices of ISPs
- One option might be to extend the Ofcom accreditation scheme

Real-Time Information

- Real-time information is given to existing consumers
- Allows them to track their usage and ensure they are still within any limits
- Offers clarity as to if and when services are affected by traffic management

Should discrimination be prohibited?

Anti-Competitive Discrimination

- At the heart of the debate is a concern that traffic management could be used anti-competitively

- To date Ofcom has received no formal complaints from industry that require investigation

- But we are aware of specific points of disagreement between network providers and ISPs and some content, applications and service providers

- The potential anti-competitive effect of discriminatory traffic management policies may be a valid concern and relevant to consider as part of our general duty to promote competition

Questions

- What evidence is there of anti-competitive discrimination taking place in the market today?

- If there is anti-competitive discrimination, can this be managed through competition in the market and measured consumer transparency?

- If not should any rule be non-discriminatory between ISPs regardless of size or SMP?

- Should any rule impose a zero price cap?

The economic perspective on two sided markets

- ISPs are platforms servicing separate groups: consumers and content providers

- Consumers value additional content and content providers value additional consumers

- Is it therefore efficient to factor in these effects in prices charged to both sides?

Two Sided Market

additional consumers benefit content providers

Consumers Price → **ISPs** ← Price? **Content Providers**

extra content benefits consumers
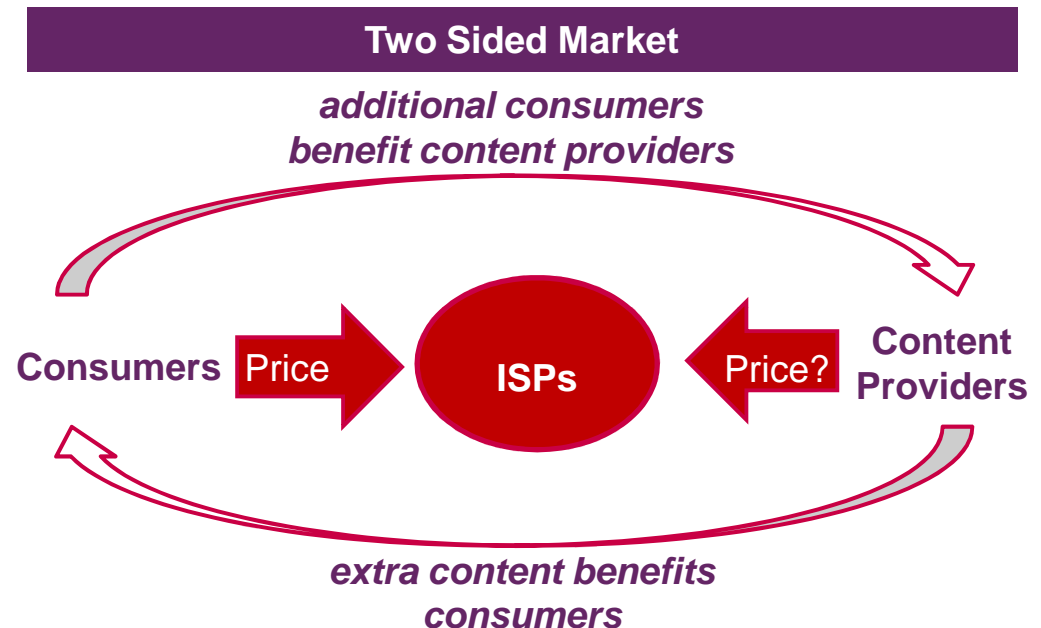
Questions

- Is **zero the right price for content providers**?
- What are the risks of **overcharging**?
- If charging is allowed will **price rebalancing** result in "cheaper " prices for consumers?

Quality of Service

- Article 22(3) of the Universal Service Directive provides that:

  - NRAs are able to set **minimum quality of service** requirements on public communications networks to prevent degradation of service or slowing down of traffic over networks; and

  - a process of consultation involving the NRAs, the Commission and BEREC where minimum **quality of service** requirements are imposed, in order to ensure that they do not adversely affect the functioning of the internal market

- When considering quality of service we would like to understand:
  - Stakeholder views on trigger conditions for when QoS might be required
  - What QoS might look like and how it could be measured
  - What impact would it have on industry and what benefits would it bring to consumers

- Some are interpreting this provision as providing for the creation of 'two tier' offers:
  - Guaranteed, best efforts internet with minimal traffic management
  - Managed services in which traffic management is unrestricted

Timing and next steps

- The discussion document kicked off the debate. The consultation period closed on September 9th

- We are working through the submissions and welcome further stakeholder and industry views on the issues of discrimination, consumer transparency and quality of service

- We have already held a consumer transparency workshop to discuss what good practice looks like, and would be interested to hear from groups or companies with practical examples

- Ofcom will feedback the results to other bodies considering net neutrality and traffic management, e.g. European Commission

- It will also allow us to prepare in advance for any new responsibilities under the Telecoms Framework as transposed by the UK Government which comes into force next year

- We will publish a statement summarising the responses and our current thinking in November and undertake research looking at consumer behaviour and the technical elements of traffic management to be completed in December